



Japanese Language Declaration  
特許出願宣誓書

私は、下欄に氏名を記載した発明者として、以下の通り宣言する：

私の住所、郵便の宛先および国籍は、下欄に氏名に続いて記載したとおりであり、

名称の発明に関し、請求の範囲に記載した特許を求める主題の本来の、最初にして唯一の発明者である(一人の氏名のみが下欄に記載されている場合)か、もしくは本来の、最初にして共同の発明者である(複数の氏名が下欄に記載されている場合)と信じ、

フォトニック結晶の製造方法および  
フォトニック結晶

その明細書

(該当する方に印を付す)

☐ ここに添付する。

☒ 2003 年 6 月 20 日に出願番号

第 10/601,001 号として提出し、

日に補正した。

(該当する場合)

私は、前記のとおり補正した請求の範囲を含む前記出願の内容を検討し、理解したことを陳述する。

私は、連邦規則法典 37 部第 1 章第 56 条 (a) 項に従い、本題の審査に所要の情報を開示すべき義務を有することを認める。

As a below named inventor, I hereby declare that :

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

METHOD FOR PRODUCING PHOTONIC  
CRYSTAL, AND PHOTONIC CRYSTAL

the specification of which

(check one)

☐ is attached hereto.

☒ was filed on June 20, 2003 as

Application Serial No. 10/601,001

and was amended on

(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

## Japanese Language Declaration

私は、合衆国法典第 3 5 部第 1 1 9 条にもとづく下記の外国特許出願または発明者証出願の外国優先権利益を主張し、さらに優先権の主張に係わる基礎出願の出願日前の出願日を有する外国特許出願または発明者証出願を以下に明記する：

### Prior foreign applications

先の外国出願

<i>None</i>	
(Number) (番号)	(Country) (国名)
<hr/>	
(Number) (番号)	(Country) (国名)
<hr/>	
(Number) (番号)	(Country) (国名)

私は、合衆国法典第 3 5 部第 1 2 0 条にもとづく下記の合衆国特許出願の利益を主張し、本願の請求の範囲各項に記載の主題が合衆国法典第 3 5 部第 1 1 2 条第 1 項に規定の態様で先の合衆国出願に開示されていない限度において、先の出願の出願日と本願の国内出願日または PCT 国際出願日の間に公表された連邦規則法典第 3 7 部第 1 章第 5 6 条(a)項に記載の所要の情報を開示すべき義務を有することを認める：

<i>None</i>	
(Application Serial No.)	(Filing Date)
(出願番号)	(出願日)
<hr/>	
(Application Serial No.)	(Filing Date)
(出願番号)	(出願日)

私は、ここに自己の知識にもとづいて行った陳述がすべて真実であり、自己の有する情報および信ずるところに従って行った陳述が真実であると信じ、さらに故意に虚偽の陳述等を行った場合、合衆国法典第 1 8 部第 1 0 0 1 条により、罰金もしくは禁錮に処せられるか、またはこれらの刑が併科され、またかかる故意による虚偽の陳述が本願ないし本願に対して付与される特許の有効性を損なうことがあることを認識して、以上の陳述を行ったことを宣言する。

I hereby claim foreign priority benefits under title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

### Priority claimed

優先権の主張

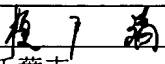
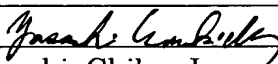
<input type="checkbox"/>	<input type="checkbox"/>
Yes あり	No なし
<input type="checkbox"/>	<input type="checkbox"/>
Yes あり	No なし
<input type="checkbox"/>	<input type="checkbox"/>
Yes あり	No なし

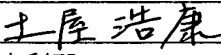
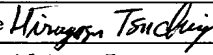
I hereby claim the benefit under title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulation, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(現状)	(Status)
(特許済み、係属中、放棄済み)	(Patented, pending, abandoned)
<hr/>	
(現状)	(Status)
(特許済み、係属中、放棄済み)	(Patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Japanese Language Declaration

唯一のまたは第1の発明者の氏名 榎戸 靖	Full name of sole or first inventor Yasushi ENOKIDO
同発明者の署名  日付 8/4/2003	Inventor's signature  Date 8/4/2003
住所 日本 千葉県 千葉市	Residence Chiba-shi, Chiba, Japan
国籍 日本	Citizenship Japan
郵便の宛先 TDK株式会社 内 日本国 東京都 中央区 日本橋一丁目13番1号	Post Office Address (C/O) TDK Corporation 1-13-1, Nihonbashi, Chuo-ku, Tokyo 103-8272 Japan

第2の共同発明者の氏名(該当する場合) 土屋 浩康	Full name of second joint inventor Hiroyasu TSUCHIYA
同第2発明者の署名  日付 8/4/2003	Second Inventor's signature  Date 8/4/2003
住所 日本 秋田県 由利郡	Residence Yuri-gun, Akita, Japan
国籍 日本	Citizenship Japan
郵便の宛先 TDK株式会社 内 日本国 東京都 中央区 日本橋一丁目13番1号	Post Office Address (C/O) TDK Corporation 1-13-1, Nihonbashi, Chuo-ku, Tokyo 103-8272 Japan



Patent Office Rules and Practice [R64 7/95], VOL \*\*, FORM 12-2

Attorney's Docket No. MIT 10283 US

**PATENT** \_\_\_\_\_

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

☒ In re application of: Yasushi ENOKIDO and Hiroyasu TSUCHIYA

Serial No.: 10/601,001

Group No.: 1765

Filed: June 20, 2003

Examiner:

Conf. No. 5791

For: METHOD FOR PRODUCING PHOTONIC CRYSTAL, AND PHOTONIC CRYSTAL

☐ Patent No:

Issued:

*\*Note Insert name(s) of inventor(s) and title also for patent.*

**Commissioner for Patents**

**PO. Box 1450**

**Alexandria, VA 22313-1450**

**POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST  
(REVOCATION OF PRIOR POWERS)**

As assignee of record of the entire interest of the above identified

☒ application,

☐ patent,

**REVOCATION OF PRIOR POWERS OF ATTORNEY**

all powers of attorney previously given are hereby revoked and

**NEW POWER OF ATTORNEY**

the following attorney(s) and/or agent(s) are hereby appointed to prosecute and transact all business in the Patent and Trademark Office connected therewith.

*(list name and registration number)*

Steven J. Weissburg

Reg. No. 31-581

*(check the following item, if applicable)*

☐ Attached as part of this power of attorney is the authorization of the above-named attorney(s) to accept and follow instructions from my representative(s).

**SEND CORRESPONDENCE TO:**

Steven J. Weissburg  
238 Main Street  
Suite 303  
Cambridge, MA 02142

**DIRECT TELEPHONE CALLS TO:**

Telephone: (617) 354-9343  
Fax: (617) 354-9377

Cust. No.: 021403

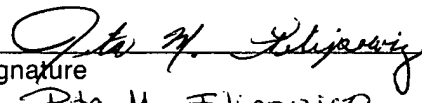
Massachusetts Institute of Technology  
(type or print identity of assignee of entire interest)  
77 Massachusetts Avenue  
(Address)  
Cambridge, MA 02139

- ☐ Recorded in PTO on \_\_\_\_\_  
Reel \_\_\_\_\_  
Frame \_\_\_\_\_  
☒ Recorded herewith

**ASSIGNEE CERTIFICATION**

Attached to this power is a "STATEMENT UNDER 37 CFR 3.73(b)".

Date 9/30/03

  
Signature  
Rita M. Filipowicz  
(type or print name of person authorized to sign on  
behalf of assignee)  
Patent Administrator  
Title

**NOTE:** The assignee of the entire interest may revoke previous powers and be represented by an attorney of his or her selection. 37 CFR 1.36.

*(check the following item if it forms a part of this power of attorney)*

- ☐ Added page-Authorization of attorney(s) to accept and follow instructions from representative.



## Statement Under 37 CFR 3.73(b)

Applicant: Yasushi ENOKIDO and Hiroyasu TSUCHIYA  
Application No.: 10/601,001 Filed: June 20, 2003  
Conf. No. 5791  
For: METHOD FOR PRODUCING PHOTONIC CRYSTAL, AND PHOTONIC CRYSTAL  
Massachusetts Institute of Technology, a Corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

The above-referenced Massachusetts Institute of Technology is the assignee of the entire right, title and interest in the above-mentioned patent application, and hereby seeks to take action in the PTO in this matter.

### Basis of Assignee's interest

Ownership by the assignee is established as follows:

- A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment is being recorded in the Patent and Trademark Office. A copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is  
attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is  
attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

I, the person signing below, state that I am empowered to sign this statement on behalf of the assignee.

Date: 9/30/03  
Name: Rita H. Filipowicz  
Title: Patent Administrator  
Signature: *Rita H. Filipowicz*

## ASSIGNMENT

I, Yasushi Enokido, residing at Inage-ku, Chiba-shi, Chiba 263-0005, mailing address (c/o) TDK Corporation, 1-13-1, Nihonbashi, Chuo-ku, Tokyo, 103-8272 Japan; and

I, Hiroyasu Tsuchiya, residing at Kisakatamachi, Yurigun, Akita 018-0132, mailing address (c/o) TDK Corporation, 1-13-1, Nihonbashi, Chuo-ku, Tokyo, 103-8272 Japan;

jointly and severally referred to below as an "ASSIGNOR", have certain rights in an invention entitled METHOD FOR PRODUCING PHOTONIC CRYSTAL, AND PHOTONIC CRYSTAL, and which is found in a U.S. Patent Application U.S.S.N. 10/601,001, filed on June 20, 2003, with the United States Patent and Trademark Office (the "INVENTION"). In consideration of One Dollar and other valuable consideration paid to me by THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY, a corporation of Massachusetts, having its principal place of business at 77 Massachusetts Avenue, Cambridge, Mass, 02139, ("ASSIGNEE") the receipt of which is hereby acknowledged, ASSIGNOR does hereby sell, assign and transfer unto said ASSIGNEE its successors and assigns, ASSIGNOR'S entire right, title and interest for the United States of America and all foreign countries including all rights of priority in said INVENTION or improvement(s) in the INVENTION, patent application(s) and patent(s) listed above and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said INVENTION(s), or any parts thereof, or on said applications, or any divisional, continuing, reissue or other applications based thereon. And ASSIGNOR agrees, for ASSIGNOR and ASSIGNOR'S heirs, successors and assigns with said ASSIGNEE and its successors and assigns but at its expense and charges, hereafter to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said ASSIGNEE, with specifications and claims in such form as shall be approved by the counsel of said ASSIGNEE and to vest and confirm in said ASSIGNEE, its successors and assigns, the legal title to all such patents.

And ASSIGNOR does hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors and assigns.

WITNESS my hand and seal:

ASSIGNOR: Yasushi Enokido

SIGNATURE

*Yasushi Enokido*

DATE:

*Aug. 11, 2003*

The above named Yasushi Enokido personally appeared and acknowledged the foregoing instrument to be his free act and deed, before me, on the dates indicated.

Notary Public

*Toru Takahashi*

## ASSIGNMENT

I, Yasushi Enokido, residing at Inage-ku, Chiba-shi, Chiba 263-0005, mailing address (c/o) TDK Corporation, 1-13-1, Nihonbashi, Chuo-ku, Tokyo, 103-8272 Japan; and

I, Hiroyasu Tsuchiya, residing at Kusakatamachi, Yurigun, Akita 018-0132, mailing address (c/o) TDK Corporation, 1-13-1, Nihonbashi, Chuo-ku, Tokyo, 103-8272 Japan;

jointly and severally referred to below as an "ASSIGNOR", have certain rights in an invention entitled METHOD FOR PRODUCING PHOTONIC CRYSTAL, AND PHOTONIC CRYSTAL, and which is found in a U.S. Patent Application U.S.S.N. 10/601,001, filed on June 20, 2003, with the United States Patent and Trademark Office (the "INVENTION"). In consideration of One Dollar and other valuable consideration paid to me by THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY, a corporation of Massachusetts, having its principal place of business at 77 Massachusetts Avenue, Cambridge, Mass, 02139, ("ASSIGNEE") the receipt of which is hereby acknowledged, ASSIGNOR does hereby sell, assign and transfer unto said ASSIGNEE its successors and assigns, ASSIGNOR'S entire right, title and interest for the United States of America and all foreign countries including all rights of priority in said INVENTION or improvement(s) in the INVENTION, patent application(s) and patent(s) listed above and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said INVENTION(s), or any parts thereof, or on said applications, or any divisional, continuing, reissue or other applications based thereon. And ASSIGNOR agrees, for ASSIGNOR and ASSIGNOR'S heirs, successors and assigns with said ASSIGNEE and its successors and assigns but at its expense and charges, hereafter to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said ASSIGNEE, with specifications and claims in such form as shall be approved by the counsel of said ASSIGNEE and to vest and confirm in said ASSIGNEE, its successors and assigns, the legal title to all such patents.

And ASSIGNOR does hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors and assigns.

WITNESS my hand and seal:

ASSIGNOR: Hiroyasu Tsuchiya

SIGNATURE

Hiroyasu Tsuchiya DATE: August 19, 2003

The above named Hiroyasu Tsuchiya personally appeared and acknowledged the foregoing instrument to be his free act and deed, before me, on the dates indicated.

Notary Public

Toru Takahashi